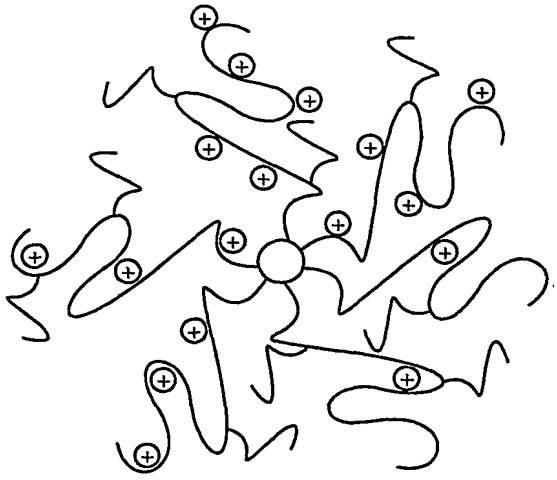
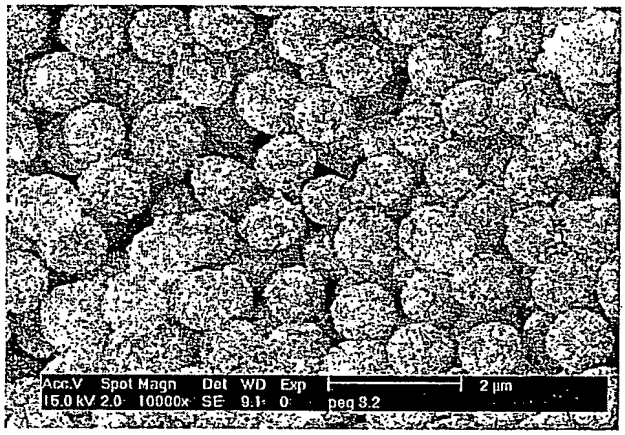
Figure 1



Core-wide corona

Figure 2



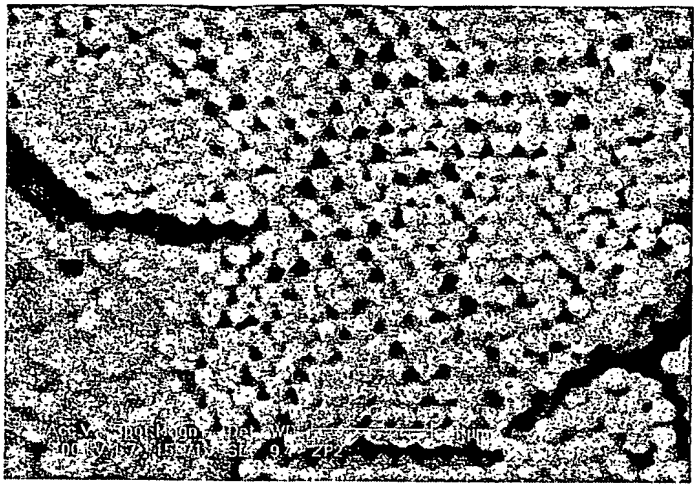


Figure 3. SEM micrograph of sample ZP2.

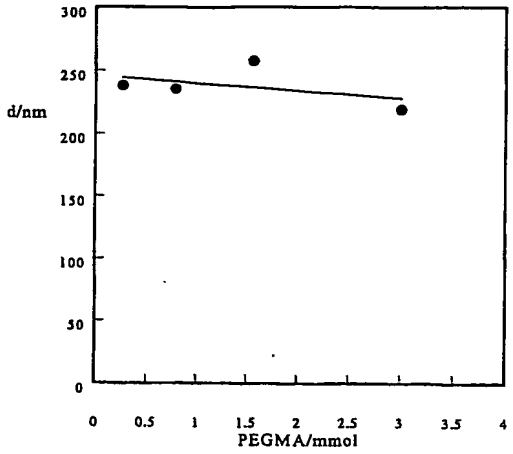


Figure 4. Nanoparticle size trend as a function of the non ionic polymer 2 concentration.

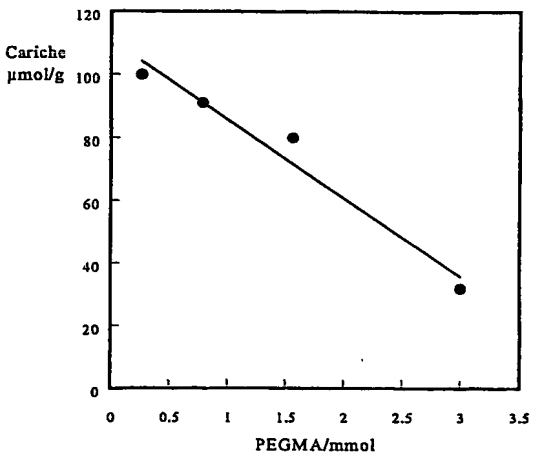
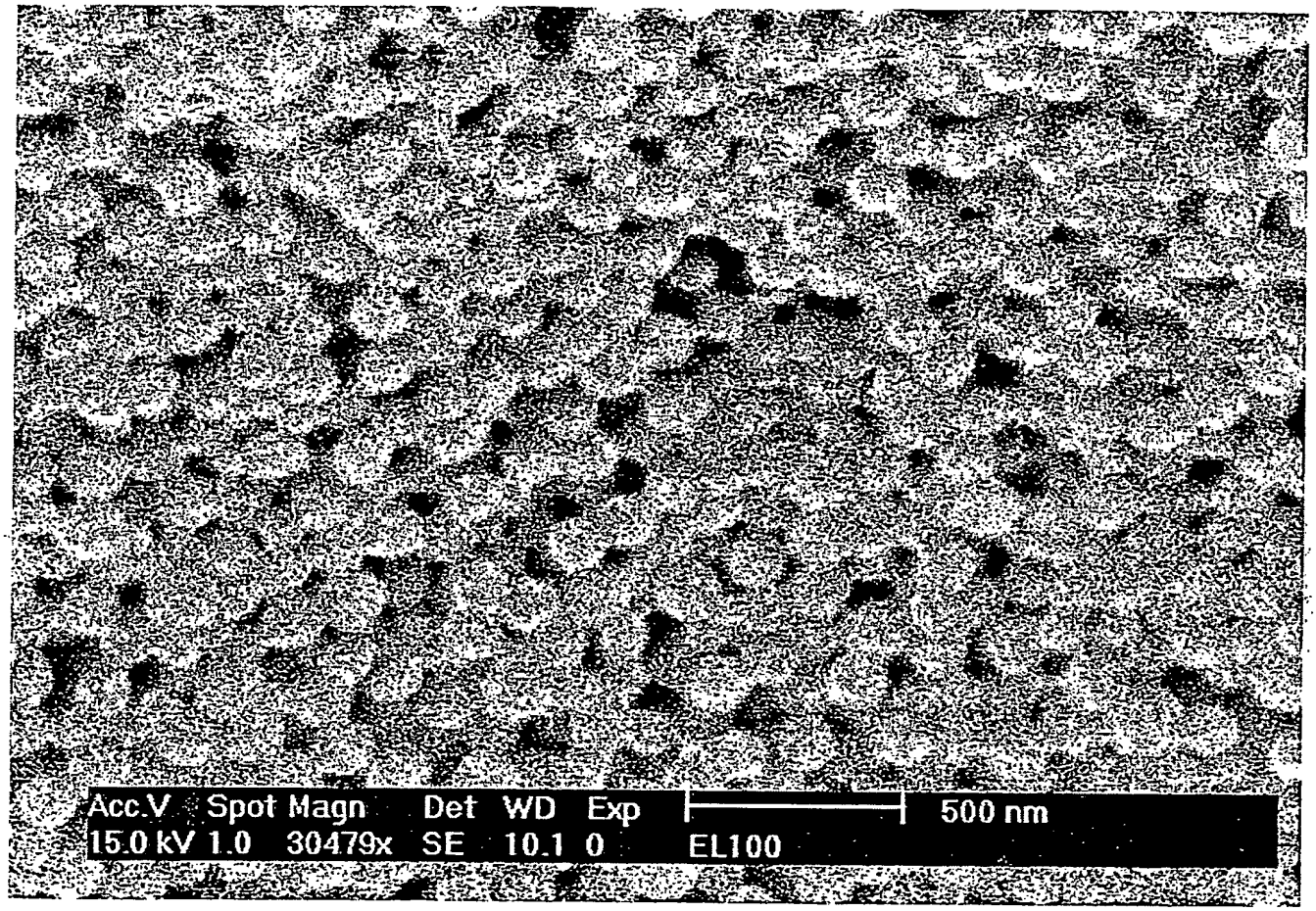


Figure 5. Trend of the quaternary ammonium group amount per gram of nanoparticles in the sample series as a function of the non-ionic comonomer 2 concentration.

Figure 6



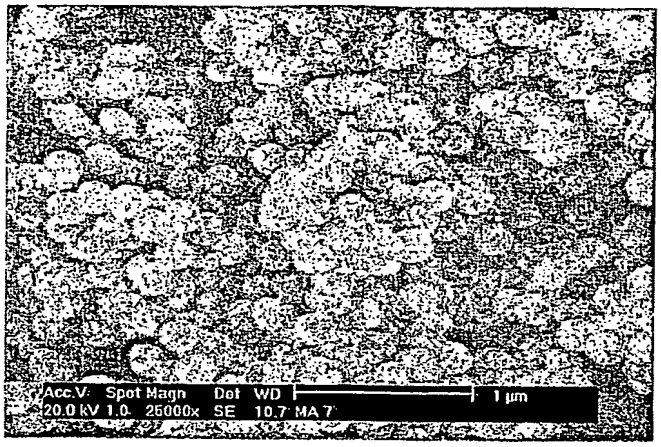


Figure 7. SEM micrograph of sample MA7.

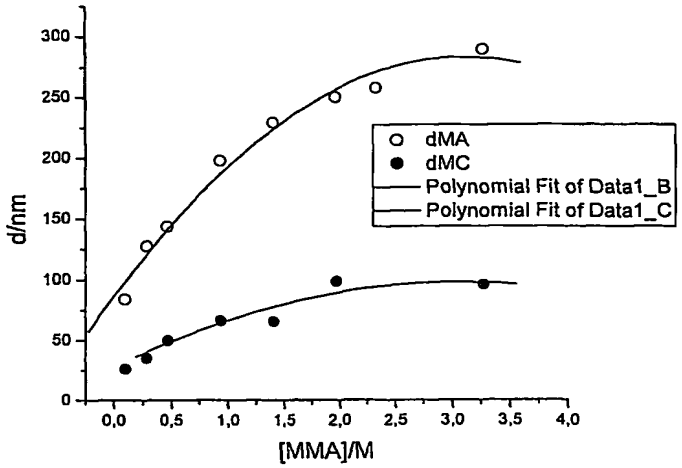


Figure 8A. Nanoparticle size trend as a function of the MMA concentration (linear plot).

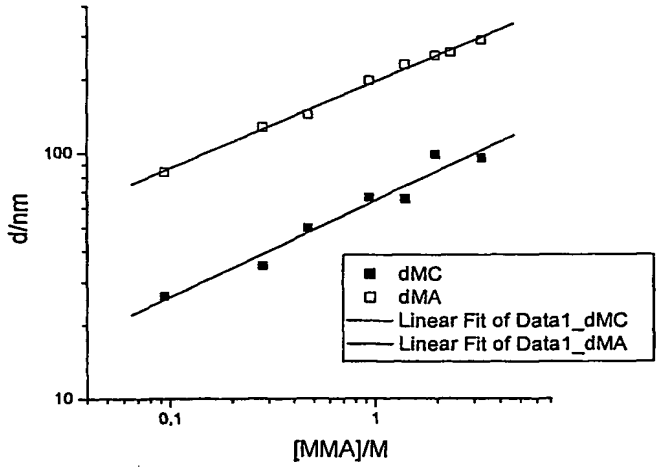


Figure 8B. Nanoparticle size trend as a function of the MMA concentration (logaritmic plot).

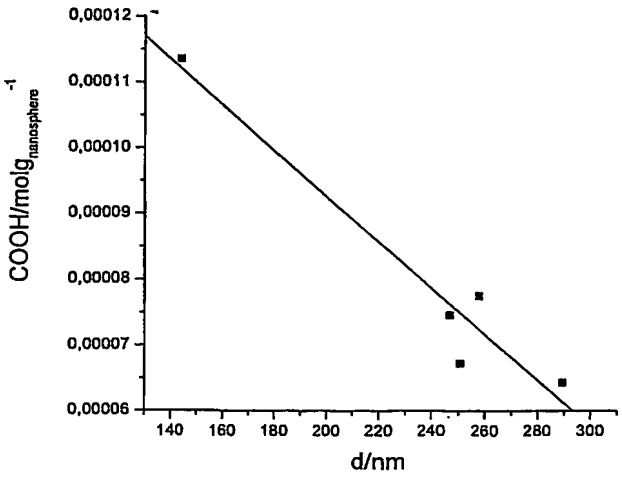
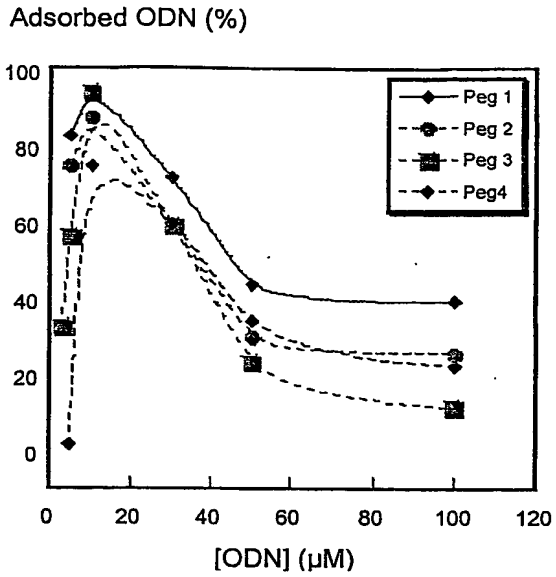
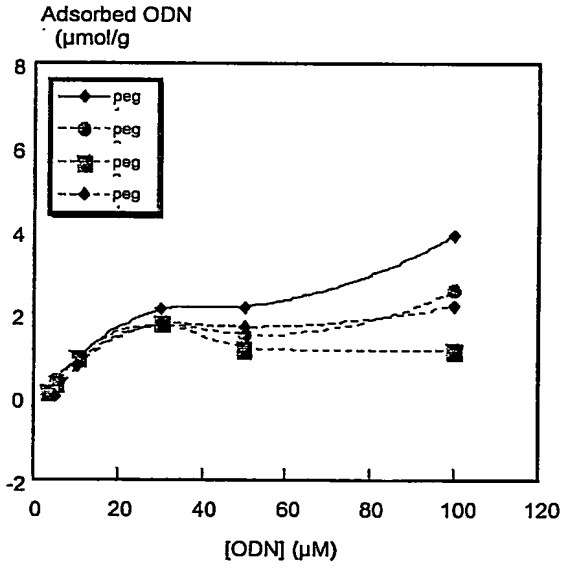


Figure 9. Carboxylic group amount on the nanoparticle sample series MAn as a function of the nanoparticle diameter.

Figure 10


Adsorbed ODN (%)
100
80
60
40
20
0
0
20
40
60
80
100
120
[ODN] (µM)
Peg 1
Peg 2
Peg 3
Peg4


Adsorbed ODN
(µmol/g
8
6
4
2
0
-2
0
20
40
60
80
100
120
[ODN] (µM)
peg
peg
peg
peg

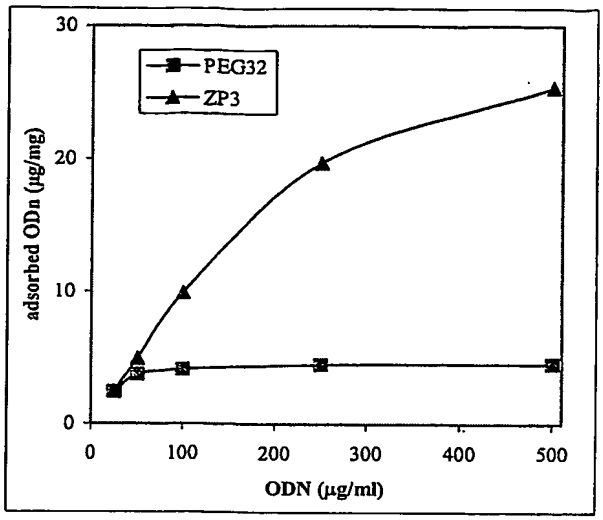


Figure 11: ODN adsorption on Pegylated nanoparticles.

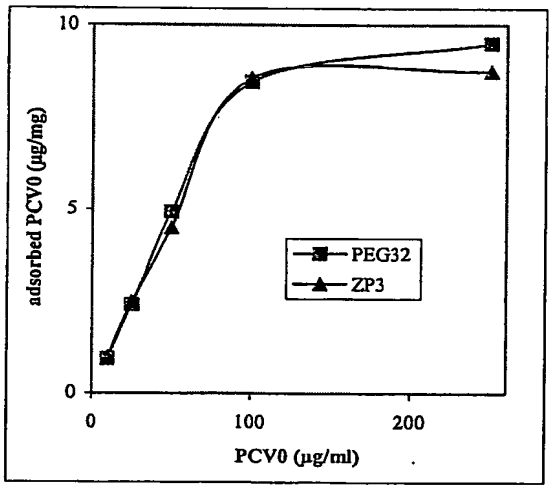


Figure 12. DNA adsorption on pegylated nanoparticles.

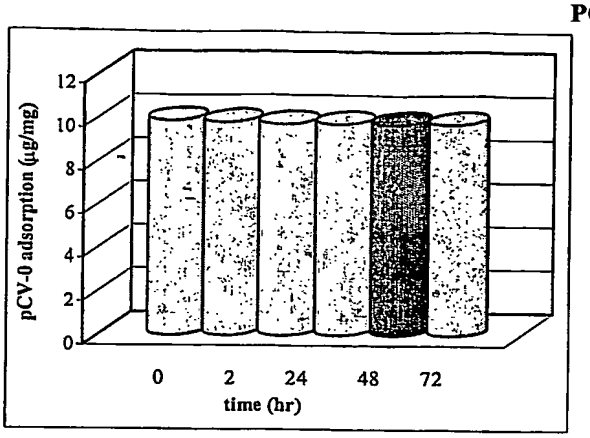


Figure 13. DNA/PEG32 complex stability in PBS buffer.

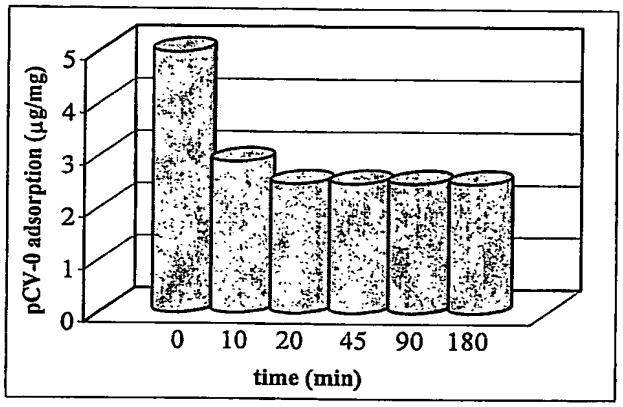


Figure 14. time dependent DNA release from PEG32

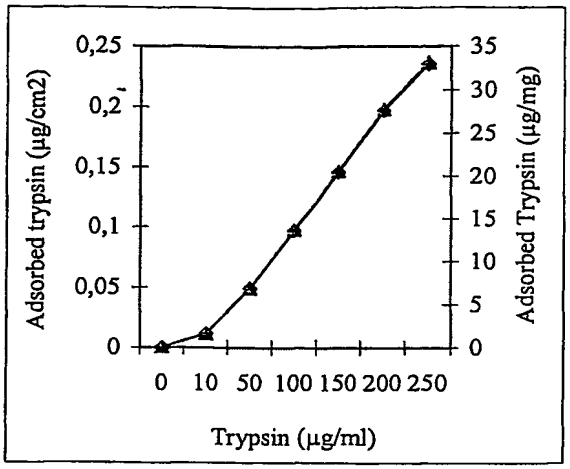


Figure 15. Adsorption of Trypsin on MA7 nanospheres.

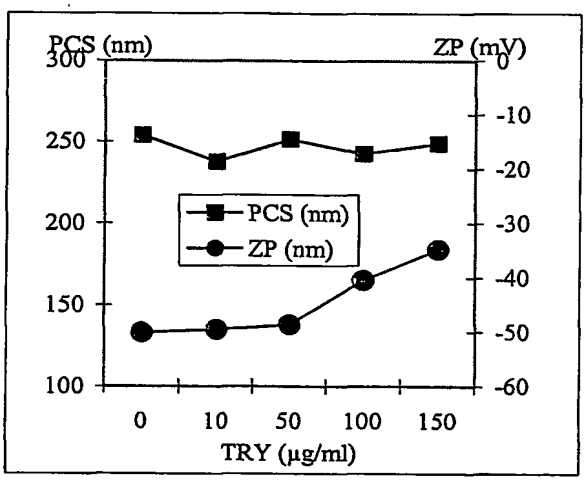


Figure 16. Zeta Potential and Hydrodynamic Diameter variation of Trypsin/MA7 complexes

Figure 17A

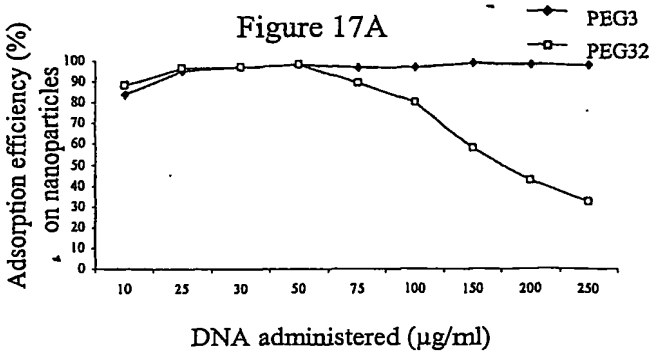


Figure 17B

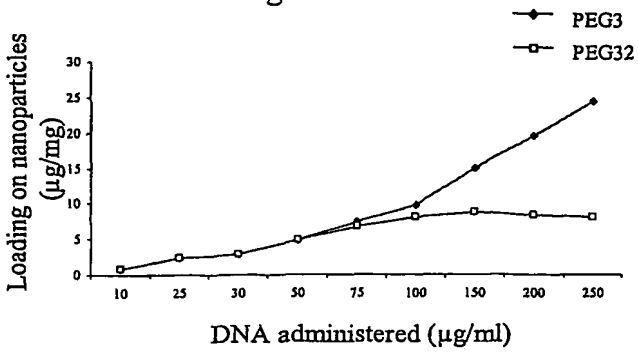


Figure 17C

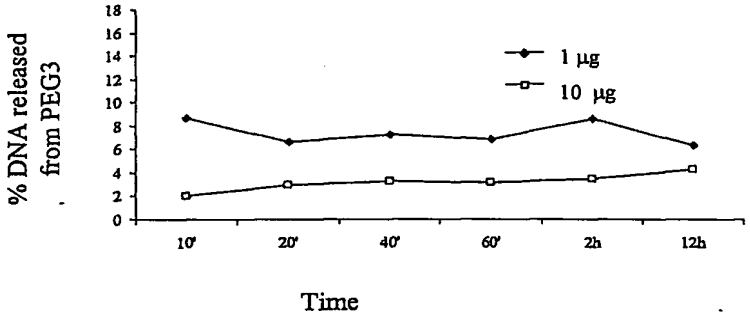


Figure 17D

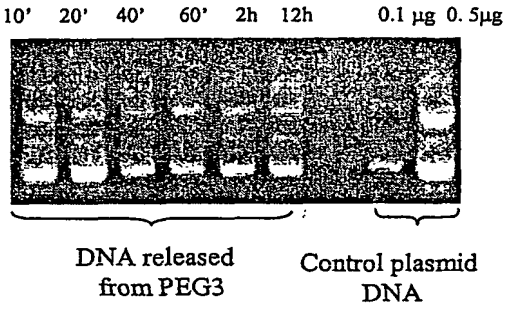


Figure 17E

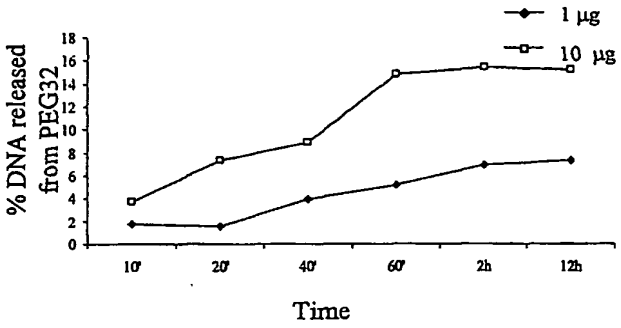


Figure 17F

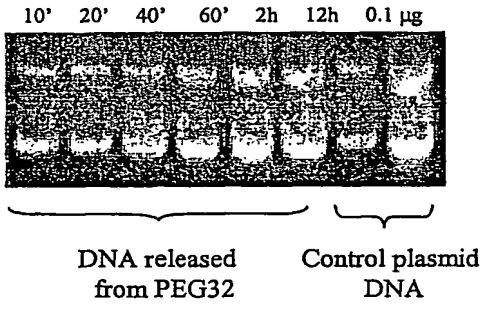


Figure 18

Fig. 18A

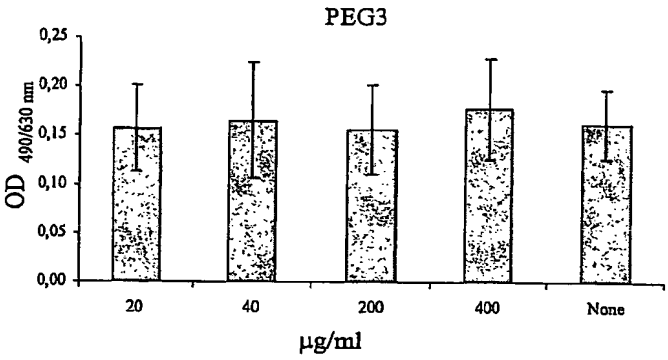


Fig. 18B

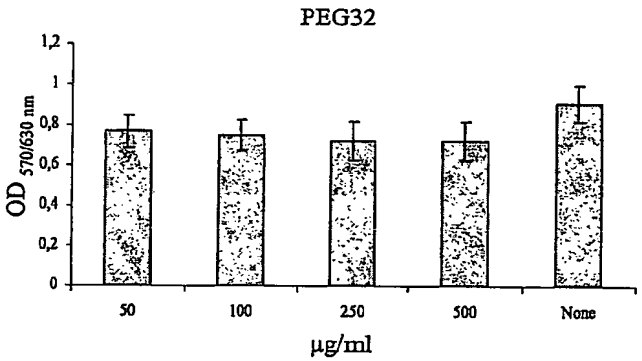


Figure 19

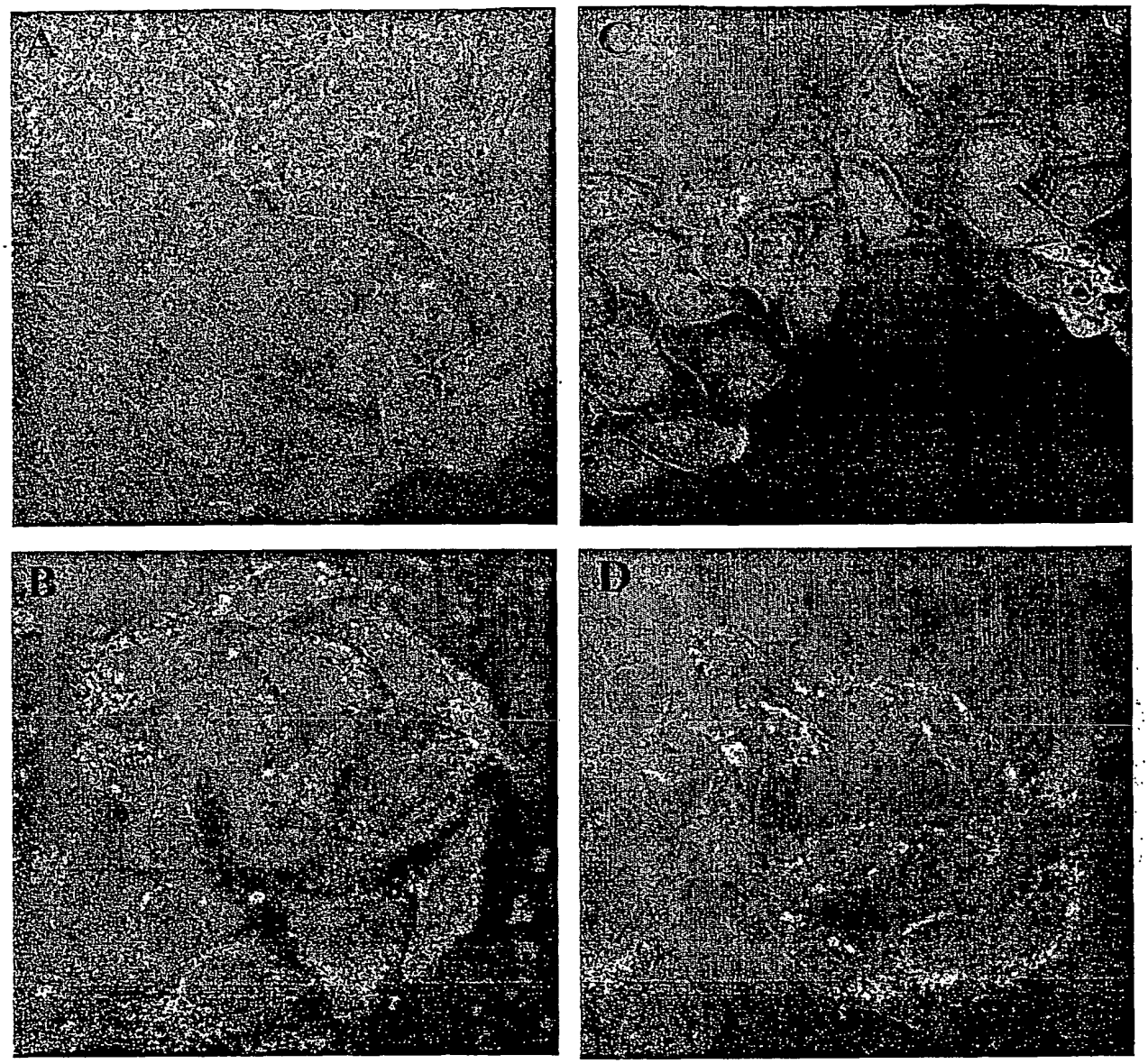


Figure 20

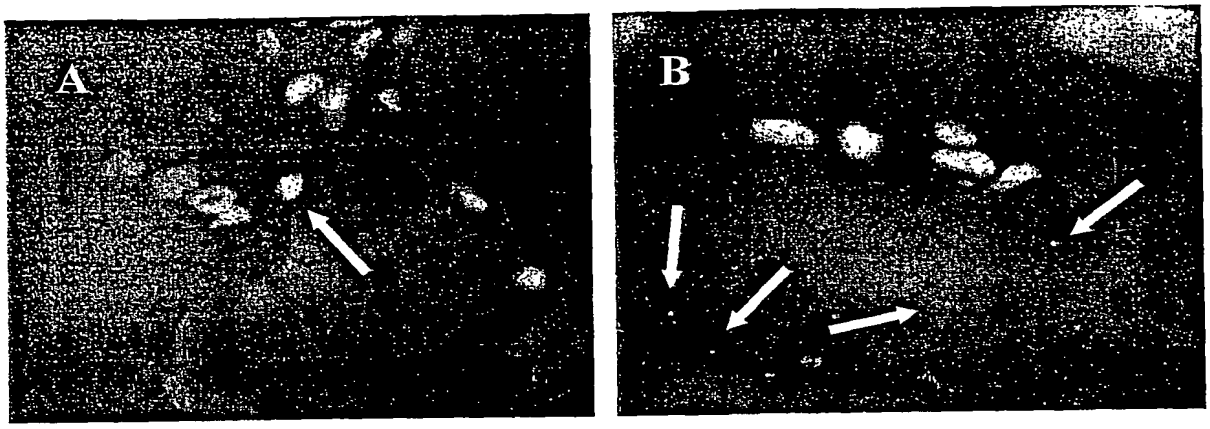
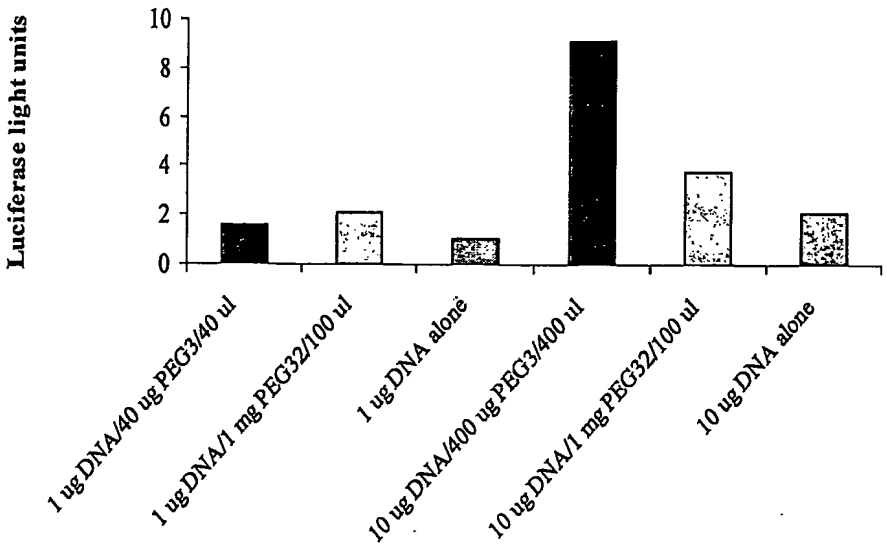


Figure 21

A



B

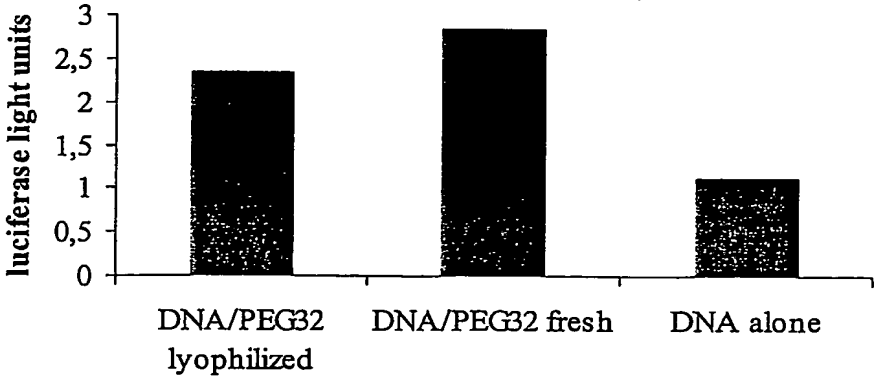


Figure 22

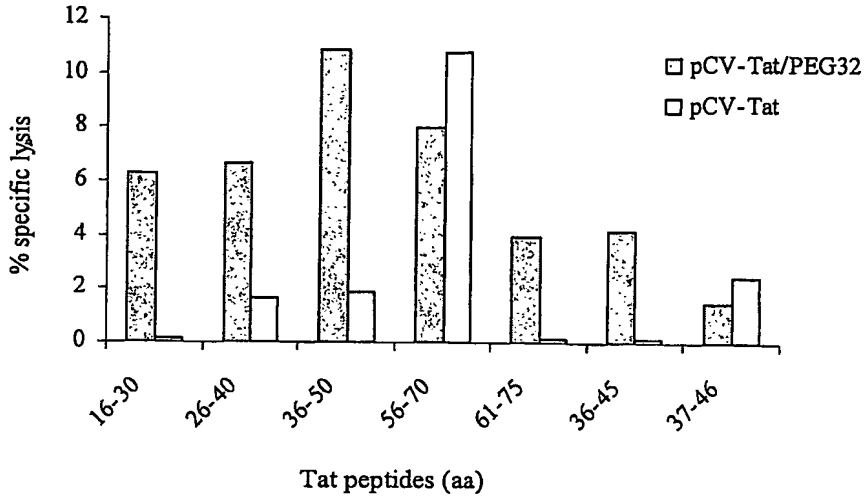
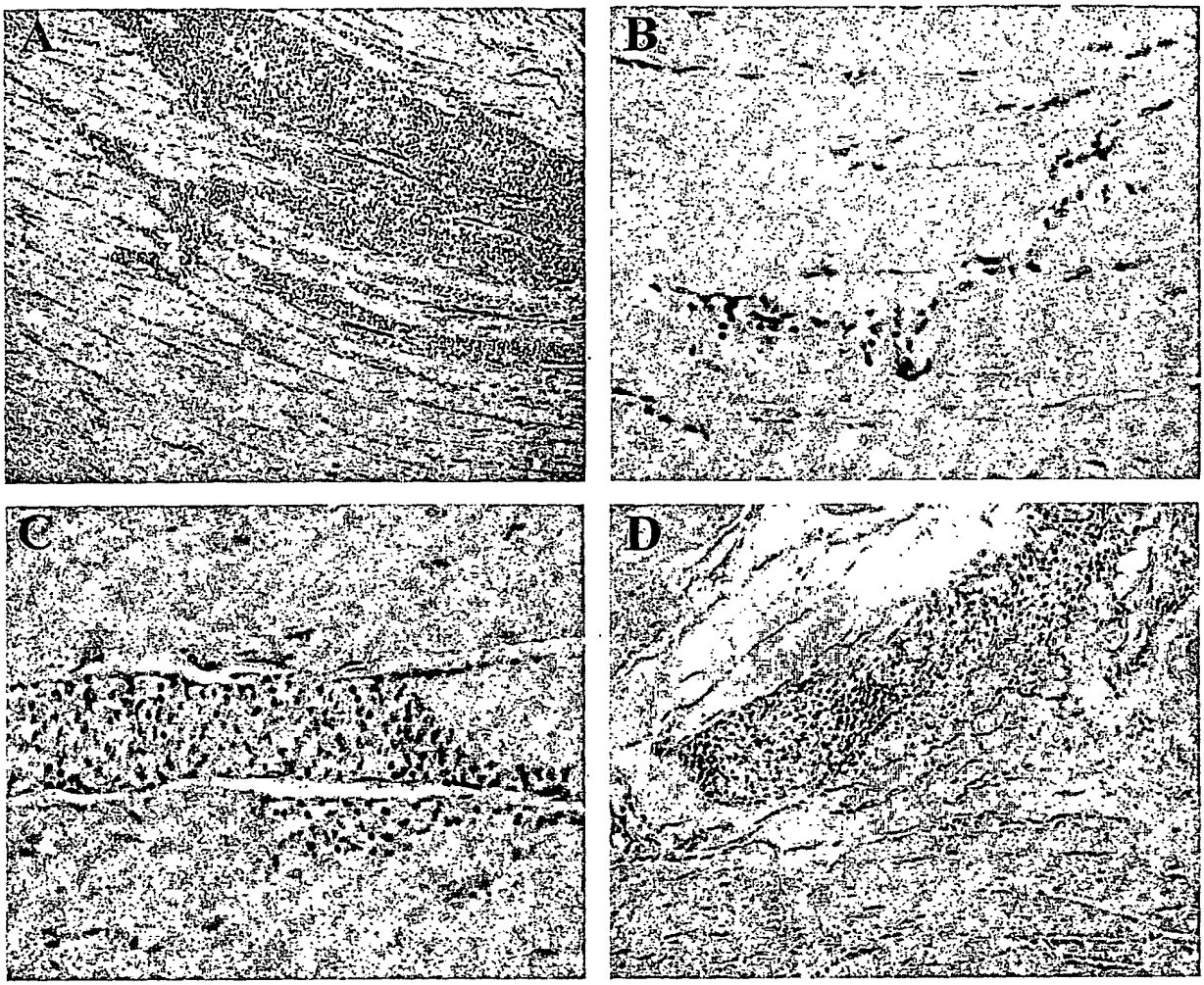

12
10
8
6
4
2
0
% specific lysis
pCV-Tat/PEG32
pCV-Tat
16-30
26-40
36-50
56-70
61-75
36-45
37-46
Tat peptides (aa)

Figure 23



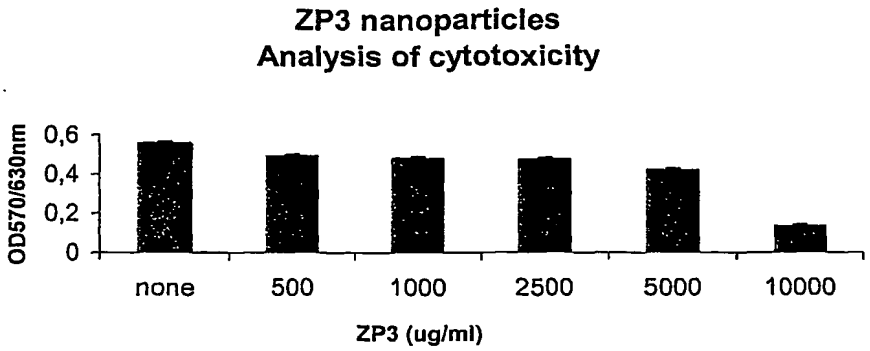


Figure 24. Evaluation of cell proliferation in the presence of ZP3 nanoparticles.

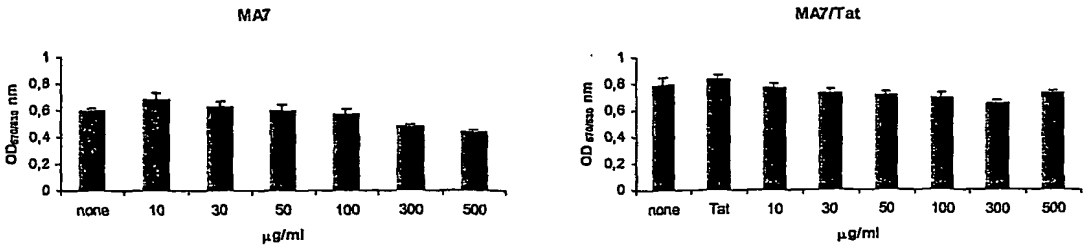


Figure 25

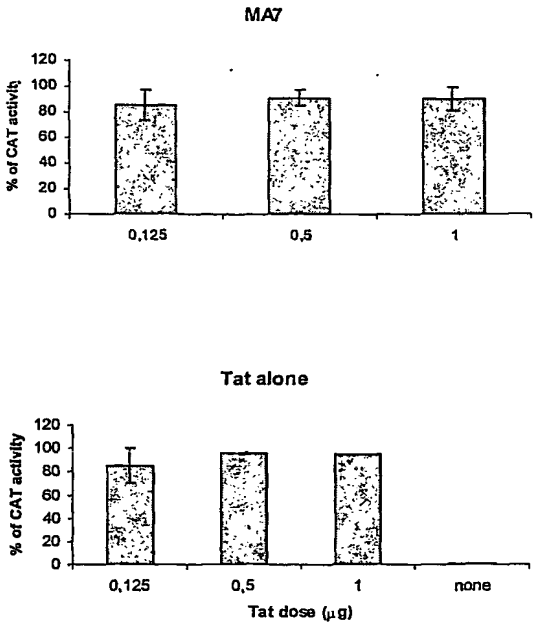


Figure 26